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EXAMINER

CHOWDHURY, NIGAR

ART UNIT	PAPER NUMBER
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2621

NOTIFICATION DATE	DELIVERY MODE
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10/25/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/016,823	Applicant(s) HARRADINE ET AL.	
	Examiner Nigar Chowdhury	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2007.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-59 and 66-80 is/are pending in the application.
 4a) Of the above claim(s) 42-56, 69-71 and 76-78 is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-41, 57-59, 66-68, 72-75, 79 and 80 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 04 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election of Group I corresponding to claims 1-41, 57-59, 66-68, 72-75, 79-80 in the reply filed on 02/07/2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 57-58, 66-68, 72 are rejected under 35 U.S.C. 101 because claimed invention is directed to non-statutory subject matter as follows. Claims 57-59, 66-68, 72-75, 79-80 defines a computer program embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – Guidelines Annex IV). That is, the scope of the presently claimed a computer program can range from paper on which the program is written, to a program simply contemplated and memorized by a

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person. The examiner suggests amending the claim to embody the program on "computer-readable medium" or equivalent in order to make the claim statutory. Any amendment to the claim should be commensurate with its corresponding disclosure.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3-6, 8, 9, 11-13, 15, 16, 17, 22-25, 27, 29, 31, 32, 36, 37, 38, 40, 41, 57-59, 66-68, 72-75, 79-80 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,760,042 by Zetts.

3. Regarding **claim 1**, an audio and/or video generation apparatus which is arranged in operation to generate audio and/or video signals, audio and/or video generation apparatus, comprising

- A recording means which is arranged in operation to record audio and/or video signals on a recording medium (fig. 1 (100, 150), col. 4 lines 61-col. 5 lines 21),

- A meta data generation processor which is arranged in operation to generate meta data identifying the content of audio/video signals in response to audio/video signals (col. 4 lines 61-col. 5 lines 21, fig. 5, col. 7 lines 6-22, fig. 12, col. 9 lines 65-col. 10 lines 36),
- A communications processor which is operable to communicate meta data separately from recording medium (fig. 1, col. 4 lines 61-col. 5 lines 21, fig. 5, col. 7 lines 6-22)

4. Regarding **claim 3**, an audio and/or generation apparatus wherein meta data generated by meta data generation processor is at least one picture which is representative of an image from recorded video signals (fig. 1, col. 4 lines 61-col. 5 lines 21, fig. 5, col. 7 lines 6-22, fig. 12, col. 9 lines 65-col. 10 lines 36).

5. Regarding **claim 4**, an audio and/or generation apparatus wherein meta data processor is arranged in operation to associate picture with an address on recording medium at which image is recorded, address forming part of meta data communicated by communications processor (fig. 1, col. 4 lines 61-col. 5 lines 21, fig. 5, col. 7 lines 6-22, fig. 12, col. 9 lines 65-col. 10 lines 36).

6. Referring **claim 5**, an audio and/or video generation apparatus wherein meta data are the in and out points of a take of the audio/video signals (fig. 12, col. 9 lines 65-col. 10 lines 13).

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7. Regarding **claim 6**, an audio and/or video generation apparatus wherein meta data includes a unique identification code for identifying the audio/video signals (fig. 5, col. 7 lines 6-22).

8. **Claim 8** is rejected for the same reason as discussed in the corresponding claim 6 above.

9. Regarding **claim 9**, a meta data generation apparatus comprising

- A meta data generation processor which is arranged in operation to receive audio and/or video signals, and to generate meta data identifying the content of audio/video signals in response to said audio/video signals (col. 4 lines 61-col. 5 lines 21, fig. 5, col. 7 lines 6-22, fig. 12, col. 9 lines 65-col. 10 lines 36)
- A communications processor which arranged to communicate meta data separately from recording medium (fig. 1, col. 4 lines 61-col. 5 lines 21, fig. 5, col. 7 lines 6-22)

10. Regarding **claim 11**, a meta data generation apparatus wherein meta data generated by meta data generation processor includes at least one picture which is representative of an image from recorded video signals (fig. 1, col. 4 lines 61-col. 5 lines 21, fig. 5, col. 7 lines 6-22, fig. 12, col. 9 lines 65-col. 10 lines 36).

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11. Regarding **claim 12**, a meta data generation apparatus wherein picture is arranged in operation to be associated with an address on recording medium at which image is recorded, address forming part of meta data communicated by communications processor (fig. 1, col. 4 lines 61-col. 5 lines 21, fig. 5, col. 7 lines 6-22, fig. 12, col. 9 lines 65-col. 10 lines 36).

12. Method **claim 13** is rejected for the same reason as discussed in the corresponding apparatus claim 1 above.

13. **Claim 15** is rejected for the same reason as discussed in the corresponding claim 9 above.

14. Regarding **claim 16**, a video generation apparatus which is arranged in operation to generate video signals representative of an image source, video generation apparatus comprising

- A recording processor which is arranged in operation to record video signals on a recording medium (fig. 1 (100, 150), col. 4 lines 61-col. 5 lines 21)
- A meta data generation processor which is arranged in operation to receive video signals and to generate at least one sample image which is representative of a video image from recorded video signals, and to associate sample image with an address on recording medium at which

video image is recorded. (col. 4 lines 61-col. 5 lines 21, fig. 5, col. 7 lines 6-22, fig. 12, col. 9 lines 65-col. 10 lines 36)

15. Regarding **claim 17**, an video generation apparatus wherein at least one sample image is first and second sample images, first of sample images being generated for a video image at an in point of at least part of video signals and second of sample images being generated for a video image at an out point of at least part of video signals, and address is a first and second address, first address indicating the place on recording medium at which in point video image is recorded, and second address indicating the place on recording medium at which out point video image is recorded (fig. 5, 12, col. 7 lines 6-22, col. 9 lines 65-col. 10 lines 36)

16. Regarding **claim 22**, a video generation apparatus wherein video signals are representative of a plurality of video material items, and meta data generation processor is arranged in operation to generate a preference marker in response to commands from a user in association with selected ones of video material items (fig. 5, 12, col. 7 lines 6-22, col. 9 lines 65-col. 10 lines 36).

17. Regarding **claim 23**, a video generation apparatus wherein meta data generation processor is arranged in operation to record data representative of preference marker on recording medium (fig. 10-12, col. 9 lines 10-col. 10 lines 36)

18. Regarding **claim 24**, a video generation apparatus comprising a data store coupled to meta data generation processor, at least one sample image and address being stored in data store separately from recording medium (fig. 5, 12).

19. **Claim 25** is rejected for the same reason as discussed in the corresponding claim 22 above.

20. Regarding **claim 27**, a video generation apparatus wherein recording medium is a linear recording medium and address is a time code corresponding to a place on recording medium where video image is recorded (fig. 1 (100, 150), col. 4 lines 61-col. 5 lines 21).

21. **Claim 29** is rejected for the same reason as discussed in the corresponding claim 6 above.

22. Meta data **claims 31, 32** are rejected for the same reason as discussed in the corresponding video claims 16, 17 respectively above.

23. **Claims 36, 40, 41** are rejected for the same reason as discussed in the corresponding claim 31 above.

24. Regarding **claim 37**, a method of generating video signals representative of an image source, method comprising the steps of

- Forming video signals (fig. 1, col. 4 lines 61-col. 5 lines 21)

- Recording video signals on a recording medium (fig. 1 (100, 150), col. 4 lines 61-col. 5 lines 21)
- Generating at least one sample image which is representative of a video image from recorded video signals, (fig. 12, col. 9 lines 65-col. 10 lines 13).
- Associating sample image with an address on recording medium at which video image is recorded (fig. 12, col. 9 lines 65-col. 10 lines 36)

25. Method **claim 38** is rejected for the same reason as discussed in the corresponding video generation claim 17 above.

26. Regarding **claim 57**, a computer program (col. 3 lines 32-37) providing computer executable instructions, which when loaded on to a data processor configures data processor to operate as an audio and/or video generation apparatus.

27. Regarding **claim 58**, a computer program (col. 3 lines 32-37) having computer executable instructions, which when loaded on to a data processor causes the processor to operate in accordance with the method according to claim 13.

28. **Claim 59** is rejected for the same reason as discussed in the corresponding claim 57 above.

29. **Claims 66-68, 72-75, 79-80** are rejected for the same reason as discussed in the corresponding claim 57 above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

30. **Claims 2, 10, 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,760,042 by Zetts in view of US Patent No. 4,963,994 by Levine.

31. Regarding **claim 2**, Zetts discloses metadata (fig. 5, col. 7 lines 6-22) but Zetts fails to disclose meta data generation processor to receive a pre-defined list of takes of audio/video signals to be generated, meta data generation processor being arranged in operation to generate meta data in association with list of takes, and communications processor is arranged to communicate meta data in association with list of takes.

Levine discloses a pre-defined list of takes o audio/video signals to be generated (Col. 1 line 54-63, Col. 2 line 12-24).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have pre- defined list of takes for future programming which will be convenient for viewer.

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32. Regarding **claim 10**, Zetts discloses stored metadata (fig. 5, col. 7 lines 6-22) but Zetts fails to disclose meta data generation processor to receive a pre-defined list of takes of audio/video signals to be generated, meta data generation processor being arranged in operation to generate meta data in association with list of takes, and communications processor is arranged to communicate meta data in association with list of takes.

Levine discloses a pre-defined list of takes o audio/video signals to be generated (Col. 1 line 54-63, Col. 2 line 12-24).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have pre-defined list of takes for future programming which will be convenient for viewer.

33. **Claim 14** is rejected for the same reason as discussed in the corresponding claim 10 above.

34. **Claims 7, 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,760,042 by Zetts in view of US Patent No. 5,052,040 by Preston et al.

35. Regarding **claim 7**, Zetts discloses unique identification code but fails to disclose unique identification code includes a UMID.

Preston discloses unique identification code includes a UMID (Fig. 4, Col. 5 lines 6-16).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have UMID for metadata. UMID will be convenient for the user to use while watching recorded program.

36. **Claim 30** is rejected for the same reason as discussed in the corresponding claim 7 above.

37. Claims 18-21, 33-35, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,760,042 by Zetts in view of US Patent No. 6,766,098 by McGee et al.

38. Regarding **claim 18**, Zetts discloses metadata generation processor is arranged in operation to generate a plurality sample images, each of which is representative of a video image from recorded video signals (Fig. 4, Col. 9 line 1-14) but Zetts fails to disclose activity detector.

McGee discloses activity detector to detect scene change (Col. 5 line 25-33, 50-60)

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have activity detector for arranging operation of receiving information to let viewer know what changes made.

39. Regarding **claim 19**, McGee discloses a video generation apparatus wherein activity detector generates activity signal by forming a histogram of color components of

video image and determining a rate of change of color components (Col. 5 line 25-33, 50-60)

40. Regarding **claim 20**, McGee discloses a video generation apparatus wherein activity detector generates activity signal by from motion vectors of image components of video image signal (Col. 6 lines 56-Col.7 lines 16).

41. Regarding **claim 21**, Zetts discloses a video generation apparatus a display processor which is arranged in operation to provide a visible representation of sample images (Fig. 12).

42. Metadata **claims 33, 34** are rejected for the same reason as discussed in the corresponding video claims 18, 19 respectively above.

43. **Claim 35** is rejected for the same reason as discussed in the corresponding claim 20 above.

44. **Claim 39** is rejected for the same reason as discussed in the corresponding claims 18 above.

45. Claims 26, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,760,042 by Zetts.

46. Regarding **claim 26**, Zetts discloses a video generation apparatus wherein address indicates a place in memory where video image is recorded (fig. 5, 12, col. 4

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lines 61-col. 5 lines 21) but fails to disclose recording medium is a random access memory.

It is noted that the use of RAM is old and well-known in the recording art. Therefore, official notice is taken. Moreover, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a well-known RAM over types of storage which require physical movement is that retrieval times are short and consistent. *Short* because no physical movement is necessary, and *consistent* because the time taken to retrieve a piece of data does not depend on its current distance from a physical head. Because of this speed and consistency, RAM is used as 'main memory' or primary storage: the working area used for loading, displaying and manipulating applications and data.

47. Regarding **claim 28**, Zetts discloses metadata processor generates sample images but fails to disclose sample images compression encoding process such as the JPEG compression encoding process.

It is noted that the use of JPEG is old and well-known in the recording art. Therefore, official notice is taken. Moreover, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a well-known JPEG compression for making more space in the recording medium.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nigar Chowdhury whose telephone number is 571-272-8890. The examiner can normally be reached on 9 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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